

**From:** [Benjamin Shorr](#)  
**To:** [Eric Blischke/R10/USEPA/US@EPA](#); [Chip Humphrey/R10/USEPA/US@EPA](#)  
**Cc:** [Carrie Smith](#); [Robert Gensemer](#); [Robert Neely](#)  
**Subject:** Re: Key Next Steps  
**Date:** 12/05/2006 03:31 PM

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Comments:

## Preliminary Steps Section

Identify the receptors we will look at for each exposure pathway.  
For each receptor, identify whether it will be evaluated on a point  
by point basis, fate and transport segment basis or site-wide basis.

1. The identification of contaminant summary methodology should be worked out between task leads (and their teams) and the spatial lead (NOAA or PMX). I don't think all of the task leads necessarily have the info to make this decision a priori. The list should also be expanded to include simply points, F&T segments, site wide, habitat (nearshore F&T segments), original (shallower) nearshore segments, home-ranges, foraging areas, beach access or other appropriate spatial scale.

2. I will take the first crack at identifying layers based on document review- need input.

### Secondary steps

1. I agree with Carrie that statistical analyses and comparisons should be explicit as possible. That is- any scenarios that have variations in spatial scale or statistically based selection should be thought out or at least an attempt at sketching them out.

2. Again, consider other appropriate spatial scales for receptors/ receptor class (see above)

3. It will be necessary to take an overall look at the data decision criteria (should be explicit) for the individual evaluations and figure out which ones have commonalities so we can efficiently work with common datasets.

I think that this is a great start- I expect that there will be much iterative work between task leads, government teams and PMX to define the scope and exact methods for these analyses-

Ben

Carrie Smith wrote:

Eric -

I think this definitely captures the conclusions we reached yesterday. A few points of clarification:

### Preliminary steps section:

1. It's probably safe to say that the F/T segment layer has been finalized and will be submitted to the F/T group on Wednesday. Also, resolution of the 9.4 to 10.4 segment issue will be addressed upon integration of the changes agreed to in the F/T meeting last week.

2. Where it mentions: *"Identify the receptors we will look at for each exposure pathway. For each receptor, identify whether it will be evaluated on a point by point basis, fate and transport segment basis or site-wide basis."*, I think it would be a good idea to indicate that the expectation is that, where possible, these spatial-scale decisions should be made by the task leads and provided to PMX to help guide secondary steps.

Secondary steps section:

1. Again, where it mentions: *"Pull data from spatial segments necessary for evaluation. Need to identify key parameters that we will look at such as mean, median, maximum, 95% UCL, etc."*, I think it would be a good idea to suggest the task leads consider which summary statistics they are interested in looking at and provide guidance to PMX. In general, it just seems like the more details we can get upfront from the task leads, the more efficient we will be in meeting everyone's requests/expectations.

2. Related to comments above: *"Evaluate data spatially for select chemicals."* Again, if task leads have specific ideas on which chemicals they'd like to look at up front (prior to screening), it would be great to have them provide this info to PMX.

So, in general, I think we should indicate that as much detail as possible (on chemicals, statistics, receptor spatial-scale, etc.) be provided from the task leads up-front to ensure efficiency in these data evaluations.

Hope this helps!  
Carrie

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Carrie and Ben, I have put together an outline of our next steps for the data evaluation process. I have broken it out into three categories as described below. This is pretty general. My hope is that we can use this as a framework to get more specific - especially for the initial data evaluation tasks. Please look this over and add any additional steps or detail that you feel should be included. I would like to send out to TCT group later today.

Thanks, Eric

Preliminary Steps - These steps focus on getting us ready to perform the data evaluation process

Finalize fate and transport segments. This is critical not only to the data evaluation but also the merging of the EFDC and contaminant fate and transport model. Ben will adjust to -35'. Segment 9.4 - 10.4 needs to be returned to original 9.4 - 10 and 10 - 10.4.

Update Query Manager. The QM data base is undergoing final QA/QC by

NOAA and should be updated shortly.

Build water data base based on surface water and transition zone water spreadsheets on LWG portal. Data compilation rules should be consistent with QM rules. PMX will check in with Jay Field to ensure consistency with QM. Should be fairly straight forward.

Reach agreement on data rules and summation rules that we will be applying. Different summation rules may apply to human health and eco.

Identify the receptors we will look at for each exposure pathway.

For each receptor, identify whether it will be evaluated on a point by point basis, fate and transport segment basis or site-wide basis.

Identify layers that we need and forward request to LWG.

Secondary Steps - These are the initial data evaluation steps that we will perform.

Identify PRGs and TRVs to be used for screening. See my earlier email dated November 27, 2006. PRGs that are readily available or easy to develop (these include water screening levels, SQGs, Region 9 PRGs, TRVs, fish tissue PRGs protective of human health) should be tabulated first. Sediment PRGs developed based on BSAFs, the food web

model and dietary models may need to come later. I have requested a table of screening levels and TRVs from the LWG. However, if the table is not provided soon, will need to recreate.

Pull data from spatial segments necessary for evaluation. Need to identify key parameters that we will look at such as mean, median, maximum, 95% UCL, etc.

Begin evaluation of bioaccumulative relationships and dietary exposure models to derive additional sediment PRGs. Simple models should be applied initially. More detailed evaluations can happen later.

Perform screening as necessary to identify the chemicals for full evaluation. Key factors for identifying chemicals to focus on include the applicability of the chemical to the exposure pathway being evaluated, the frequency of exceedance and the magnitude or exceedance.

Evaluate data spatially for select chemicals. Based on the exposure area of the receptor or receptor class, sediment data should be evaluated on a point by point, fate and transport segment and site-wide basis. Composite fish tissue samples should be evaluated on a composite by composite basis. Screening of sediment data will Screening of surface water data will consider drinking water PRGs and

MCLs, chronic AWQC and fish consumption AWQCs. Screening will be based on a point by point basis.

More involved steps - These steps will build off the initial data evaluation steps.

Finish up WOE framework and apply to benthic community  
Integration of upland site data and information. Consider  
contaminant migration pathways such as groundwater or stormwater  
discharges.

Evaluate bioaccumulative relationships to consider factors such as  
bioavailability, relative contribution of water, sediment and prey  
items, depth of sediment exposure, etc.

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